"Schools" are perfectly designed to get the results they are getting now. If "schools" want different results, they must measure and then change their processes to get the results they really want.

Adapted from W. Edwards Deming
Continuous Improvement Guru

School processes are the only measures over which we have almost complete control in the education setting.

School processes are the only measures over which we have almost complete control in the education setting. Public schools cannot control who the students are, where they come from, or why they think the way they do when they come to us. However, schools can control a portion of the student learning results—through their processes (i.e., curriculum, instructional strategies, assessment practices, programs, environment).

School processes are actions administrators and teachers take to achieve the purpose of the school—the vision.

SCHOOL PROCESSES DATA: WHAT THEY ARE AND WHY THEY ARE IMPORTANT TO CONTINUOUS SCHOOL IMPROVEMENT

School processes are actions administrators and teachers take to achieve the purpose of the school—the vision. School processes are those things that teachers do by habit, by custom, or inadvertently, and those things that may help or hinder progress. School processes also include those elements that help your school improve.

School processes are important to continuous school improvement because they are what produce school and classroom results.

School processes data are important because they tell us about the way we work, about how we get the results we are getting, set us up to know what is working and what is not working, and answer the continuous school improvement question, *What are our processes?* School processes are important to continuous school improvement because they are what produce school and classroom results.

There are different types of school processes that we need to study and improve. Categories were established to help us think about all the processes that create the results we are getting in schools. Examples of each type of school process are shown below for—

- *Instructional processes*—the techniques and strategies that teachers use in the learning environment.
- *Organizational processes*—those structures the school puts in place to implement the vision.
- *Administrative processes*—elements about schooling that we count, such as class sizes.
- *Continuous school improvement processes*—the structures and elements that help schools continuously improve their systems.

Some data collected as demographics imply processes behind the terms, such as administrative processes. Programs are school processes too. Programs are planned series of activities and processes, with specific goals. See the lists of example processes and programs in Figure 6.1.

Understanding the schools' processes and programs is the first step in clarifying how a school is achieving its goals and getting its results, and determining if instructional congruence exists. Understanding the cumulative effect of the entire system, including classroom processes, is necessary for determining what needs to change to ensure learning for *all* students, and what and how we want to staff to implement certain processes. While all of the elements listed in Figure 6.1 are part of the processes that tell us how we are fulfilling the vision of our school, it may be the instructional strategies and assessments occurring every day in our classrooms that deserve the first analysis.

Understanding the schools' processes and programs is the first step in clarifying how a school is achieving its goals and getting its results, and determining if instructional congruence exists.

HOW TO ANALYZE SCHOOL PROCESSES DATA

The evidence of what we do and how we do it is data. Four steps will support your analysis of school processes data:

Step 1. ***List the programs and processes being used in your school.*** Use the school processes inventory (Appendix B4) or something similar. It is important to be as comprehensive as possible. To understand how we got our results and to get even better results, staff must be clear about what is being implemented to get these results.

Step 2. ***Analyze the lists of programs and processes.*** As a staff, determine which programs and processes need to be deleted, added, and implemented by everyone. Keep the school vision, purpose, and goals at the forefront as you review.

Step 3. ***Analyze the programs and processes using the Measuring Programs and Processes Table.*** The complete *Measuring a Program or Process* activity is found in Appendix D. This powerful table helps staff spell out the important concepts for developing, implementing, and evaluating a program or process with fidelity and integrity. The questions in the table are:

- What is the purpose of the program or process?
- How will you know the purpose is being met? Or what are the outcomes?

HOW TO ANALYZE SCHOOL PROCESSES DATA

Step 1. ***List the programs and processes being used in your school.***
Step 2. ***Analyze the lists of programs and processes.***
Step 3. ***Analyze the programs and processes using the Measuring Programs and Processes Table.***
Step 4. ***Use flowcharts to describe and visualize how a program or process is to be implemented.***

Figure 6.1
SCHOOL PROCESSES EXAMPLES

Instructional Processes	Organizational Processes	Administrative Processes	Continuous School Improvement Processes	Programs
• Curriculum (what we teach) • Instructional Strategies (how we teach) • Assessments (how we know students are learning what we teach) • Differentiated Instruction • Direct Instruction • Flipped Classrooms • Grading • Homework • Immersion • Academic conversations with students • Classroom discussions (teacher talk, student-to student talk, student-to teacher talk) • Classroom assignments (types of tasks, choices, projects, collaboration) • Inquiry process • Student reflection and self-assessment • Standards Implementation • Technology Integration • Tutoring	• Teacher Collaboration • Data Teams • Data Use • Leadership Structure (Leadership Teams) • Professional Learning Communities • Response to Intervention (RtI) • Mentoring • Instructional Coaching • Referral Process • Policies and Procedures • Parent Involvement • Teacher Hiring • Teaching Assignments • Teacher renewal (professional learning) • Professional reflection • Teacher evaluation • Inquiry process • Problem-solving • Professional discussions and support • Teacher observations • Mission • Vision	• Scheduling of classes • Class sizes • Discipline strategies • Student groupings • Policies and procedures • Enrollment in different courses/programs/program offerings • Retentions • Attendance Program • Dropout rates • Graduation rates • Teacher hiring • Teacher assignments • Teacher certification • Teacher turnover rates • Leadership turnover rates • Number of support personnel • Data collection	• Data analysis and use • Contributing cause analysis • Vision • Mission • Continuous school improvement planning • Leadership • Professional learning • Partnership • Evaluation • Self-assessment	• AVID • A+ • Accelerated Reader/Math • Advanced Placement • After School • Advanced Placement • At-Risk • Bilingual • Dropout Prevention • Gifted and Talented • International Baccalaureate • Interventions • 9th Grade Academy • Science Fairs • Service Learning • Special Education

- Who is the program/process intended to serve? Who is being served/who is not being served?
- What would it look like when the program/process is fully implemented?
- How is implementation being measured? (Should it be measured differently?)
- To what degree is the program/process being implemented?
- What are the results (in the short term and in the long term)?

An example of *The Measuring Programs and Processes Table* is shown as Figure 6.2. This example was created by Somewhere School staff members as they were starting to implement the *Common Core State Standards.* The work described in the table helps all teachers keep the purpose for doing the work at the forefront of their efforts. It shows them what it will look like when they are implementing the standards, and it sets up the monitoring and evaluation of the implementation. As their work progresses, they will add more details. (Other examples appear as Figure 12.3, and in Appendix D.)

Figure 6.2

MEASURING PROCESSES: IMPLEMENTATION OF THE COMMON CORE STATE STANDARDS

PURPOSE		PARTICIPANTS	IMPLEMENTATION		RESULTS
What is the purpose of the program or process?	***How will you know the purpose is being met? (What are the outcomes?)***	***Who is the program/ process intended to serve? Who is being served/ not being served?***	***What would it look like when the program/process is fully implemented?***	***How is implementation being measured?***	***To what degree is the program being implemented?***
The intent in implementing the CCSS is to do the following. • Ensure that all students are college and career ready by graduation for a "21st Century, globally competitive society."[ii] • Provide a focused and coherent CCSS curriculum that is results-oriented and supported by aligned instructional resources. • Use consistently CCSS based instructional strategies that are research-based, differentiated, culturally relevant and responsive, and implemented with fidelity. • Define how implementation of the CCSS supports the belief that *all students can learn* and define the implementation roles and responsibilities for each segment of the school community: students, staff, parents, and community members.	*When an effective CCSS Continuous School Improvement (CSI) and Response to Intervention (RtI) model is implemented by all school staff with fidelity, analyses of qualitative and quantitative data will reveal the following outcomes.* • *All* students are meeting grade level CCSS proficiency standards and are on a trajectory for graduating from high school prepared for success in college and career in the 21st Century globally competitive world. • *All* teachers are implementing the school's Continuous School Improvement (CSI) and Response to Intervention (RtI) models with fidelity, resulting in yearly increases in students attaining CCSS proficiency and the consistent reduction of the student failure rate. • *All* students receive a focused and coherent CCSS curriculum that is built upon a progression of learning that is implemented with fidelity, using aligned resources and evidence based, interviews and monitoring tools, differentiated, culturally relevant and responsive instructional strategies. • *All* teachers' classroom instruction, as well as their professional growth endeavors and collaborative faculty work, reflect the core intent of the CCSS and main principle of the CSI Model—the belief that *all students can learn to rigorous standards (CCSS focus on accessibility).*	*The CSI and RtI programs supporting the implementation of the CCSS are intended to serve—* • *All* Students *Those not being served by the CSI and RtI programs designed to implement the CCSS include—* • Students who are not attaining *proficiency* on CCSS annually as shown by results on the SBAC or PARCC.[iv]	(Description below. Also see attached flowchart.) *When implementation of the CCSS is fully in place, the following will occur.* *All* consistencies of the school community are fulfilling their defined roles in implementing the CCSS as is evidenced in the following ways. • Students are actively engaged in problem-solving and innovative work, assuming responsibility for their own learning, participating in and leading quality classroom discussions, demonstrating collaborative skills in group work, using technology effectively and efficiently, attaining proficiency on yearly summative assessments, staying in school with high attendance rates and few tardies, and, in high school, graduating on schedule and being accepted into an accredited college or university by end of the senior year. • *All* teachers are implementing a focused and coherent curriculum, using technology and aligned instructional resources and evidenced-based, differentiated instructional strategies with the fidelity that results in *all* students achieving proficiency on the grade level CCSS. (CSI Program Goal by Year 5).	**Continuous School Improvement Model Perceptions** Surveys, inventories, self-assessments related to culture, climate, values, and beliefs of various populations including— • Students • All staff serving the school • Parents • Community members **Demographics** District and school data and analysis of demographic data (by subgroups)— • District • School • Staff • Students • Community **Student Learning** Data from a variety of sources that include: *Formative Assessments* • Diagnostic assessment tools. • Instructionally embedded assessments. • Observations. • Teacher, peer, and self-evaluations of student work.	**CCSS Implementation** *Staff is at the starting point having done the following.* • Participated in several webinars. • Read the CCSS for their content area and literacy across History, Social Studies, Science, and Technical Subjects. • Determined that they are at the *novice* level of CCSS knowledge and so have made the CCSS the staff's top priority for the upcoming year. *The staff plan for the upcoming year includes the following—* • Conduct a CCSS Standards Study in the CoPP (PD). • Conduct an alignment of instructional resources. • Identify and fill gaps. • Write new CSI and RtI plans aligned to the CCSS. • Lay out an instructional sequence plan for teaching the CCSS by grade level. • Create materials to share with parents and community to involve them in the CCSS conversation and start a dialogue about what the CCSS will mean for students.

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Figure 6.2 *(Continued)*

MEASURING PROCESSES: IMPLEMENTATION OF THE COMMON CORE STATE STANDARDS

PURPOSE		PARTICIPANTS	IMPLEMENTATION		RESULTS
What is the purpose of the program or process?	***How will you know the purpose is being met? (What are the outcomes?)***	***Who is the program/ process intended to serve? Who is being served/ not being served?***	***What would it look like when the program/process is fully implemented?***	***How is implementation being measured?***	***To what degree is the program being implemented?***
• Support *all* students' effective CCSS transition through the school's Continuous School Improvement (CSI) and Response to Intervention (RtI) Models to prevent school failure. • Provide curriculum and instruction that result in *all* students achieving *proficiency* in English Language Arts, Mathematics, and Literacy in History/Social Studies, Science, and Technical Subjects. • Provide *all* students with continuous and timely feedback as a result of instruction that embeds formative assessment in all lessons, providing feedback in the form of teacher comments, peer feedback, and student self evaluation of work (metacognition).	• *All* students are consistently *engaged* in authentic work and instruction is evidence-based, embedding formative assessment, and targeted differentiation to address the needs of all students (those above, at, and below proficiency, special education, students with disabilities, and students transitioning from another language). • *All* teachers consistently embed a range of appropriate *formative assessment strategies* in their daily instruction, gathering data that provides *timely* feedback and re-teaching, improving future instruction and student results. • Evidence indicates that the CSI Model is being successfully supported by effective professional development, that this includes teacher collaboration on standards study, lesson study, instructional alignment, and filling instructional resource gaps. • Coaching is aligned to CCSS and is continually improving instructional design and delivery. • *All* students produce work consistently that represents grade level mastery of the CCSS, including use of critical thinking skills;[iii] proficiency in problem-solving; ability to read complex text critically and take a stance, write and speak to a variety of audiences and for a variety of purposes across content areas, apply 21st Century skills, collaborate and work effectively on teams, conduct research using a variety of technical and other resources, use feedback to improve work (teacher, peer, metacognitive), demonstrate creativity and innovation, and develop habits of mind that result in students who think like mathematicians, scientists, writers, etc.		• Students in *all* teachers' classrooms are realizing at least one year's academic growth on summative CCSS assessments (SBAC or PARCC), while the remainder of the students are attaining more than one year's growth on the CCSS. (Program Goals for Years 1-4.) • CCSS implementation is the number one agenda item at all faculty meetings, and the focus of work in the school's community of professional practice (CoPP). *All* staff members are active participants in the CoPP. • Coaching, student counseling, and afterschool learning programs are aligned to the CCSS and evaluation indicates that these strategies and programs are resulting in consistent increases in student achievement and attendance, while reducing tardies and drop-outs. • School leadership goals and practices are evidence-based, aligned to the staff's identified intent for the implementation of the CCSS. • Ongoing *formative* assessment of the school's CSI and RtI Models involves all staff and is providing for timely corrections and adjustments during the school year, while summative assessments provide for annual re-examination of the entire CSI and RtI programs, providing an opportunity to make more major and substantive data-based changes and additions.	• Inventories and surveys • Staff created formative assessments that accompany lessons/units. **Summative CCSS Assessments** • End-of-course or end-of-unit assessments. • School or district Periodic, Interim, or Benchmark Assessments (can be used as formative, summative, or both). • Accountability Assessments * Partnership for Assessment and Readiness for College and Careers (PARCC) and SMARTER Balanced Assessment Consortium (SBAC). **College Entrance and Placement Examinations** • College Entrance and Examinations (e.g., Entrance Exams–ACT, SAT). • College Placement Examinations (e.g., the University of California Analytical Writing Placement Examination, Yale Mathematics Placement Exam).	• Become familiar with the content and item specifications of the assessment Consortium (SBAC or PARCC) that will be providing their state accountability assessments. • Develop a three-year CCSS implementation plan as part of the school's new CSI plan. • Develop a *formative* assessment plan to inform and guide the development of the new CSI plan and to monitor progress. • Conduct a summative evaluation of the work complete and the processes in place to inform the next year's CCSS implementation work.

Figure 6.2 *(Continued)*

MEASURING PROCESSES: IMPLEMENTATION OF THE COMMON CORE STATE STANDARDS

PURPOSE		PARTICIPANTS	IMPLEMENTATION		RESULTS
What is the purpose of the program or process?	***How will you know the purpose is being met? (What are the outcomes?)***	***Who is the program/process intended to serve? Who is being served/ not being served?***	***What would it look like when the program/ process is fully implemented?***	***How is implementation being measured?***	***To what degree is the program being implemented?***
• Provide instruction that is designed to *engage all students* in complex, authentic tasks that require them to: * Apply critical thinking skills (problem-solving, problem-creation); * Read complex literary and informational texts critically for a variety of purposes and across content areas; * Write for a variety of audiences and purposes across disciplines; * Speak and write clearly, identify crucial points in speeches and text, use reasoning supported by evidence, take a critical stance in reading, writing and speaking; * Establish and defend an *argument* rationally in oral and written work; * Solve problems with more than one right answer or no apparent right answer; * Justify mathematical solutions; * Connect mathematical content and practices in solving problems efficiently and effectively; * Conduct research, collecting, synthesizing, and evaluating information critically, using a variety of resources including media and technology. * Construct/produce knowledge; * Revise, edit, and improve work. * Demonstrate creativity, innovation, and habits of mind.			• Parents are continually articulating the goals and importance of the CCSS to their children, providing support for homework, communicating regularly with teachers about student progress, and participating in CCSS meetings and virtual parent education. • Community members are supporting CCSS implementation through local informational campaigns, rallies, and online Community CCSS parent chat groups.	**School Processes** • Analyses of data that show how well each student population is being served including how many Level 2 students move into Level 1 or Level 3 or stay in Level 2, percent (by subgroup) of students identified for Special Education after receiving Level 2 and 3 assistance, etc. • Analyses of data specific to problem areas in curriculum, assessment, and instruction (where is the curriculum, assessment, instruction failing the students–which students? • Analyses of implementation data to identify effective and ineffective implementation strategies, or implementation strategies not being implemented with fidelity. • Analyses of data to identify needed revisions to the Action Plan. • Re-examination of alignment of resources using student assessment data to pinpoint resources not fully in alignment with the CCSS.	

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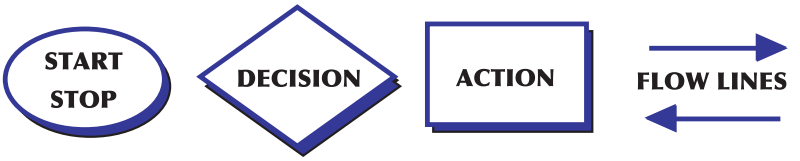
[i] Step 1 of this CCSS Implementation Model addresses the content areas of English Language Arts and Mathematics. It touches on *Literacy in History/Social Studies, Science, and Technical Subjects*, but does not represent a full implementation plan in the cross content areas during year one. The assumption is that the ELA teachers will need the first year to master their own CCSS standards before working with teachers across content areas on the *Literacy* skills that they will be incorporating in their instructional programs. A school that feels ready to take the *Literacy* standards as well during the first year could easily modify this plan to accommodate implementation of all CCSS in year one.

[ii] *Common Core State Standards for English Language Arts & History/Social Studies, Science, and Technical Subjects* , Introduction, page 3 found at: *http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf*

[ii] Hess, Carlock, Jones, & Walkup. *A "Snapshot" of the Cognitive Rigor Matrix.* 2009. NCIEA.

[iv] SBAC = SMARTER Balanced Assessment Consortium. PARCC = Partnership for Assessment of Readiness for College and Careers.

Step 4. ***Use flowcharts to describe and visualize how a program or process is to be implemented.*** A flowchart allows everyone to see and to agree upon the major steps, in sequence, in the same way. Flowcharts help with the design, implementation, and evaluation of programs, processes, and procedures. (See Appendix E for *Flowcharting a School Process* and more examples.) The typical symbols used in flowcharting educational processes include:



Use flowcharts to describe and visualize how a program or process is to be implemented. A flowchart allows everyone to see and to agree to the major steps, in sequence, in the same way.

Figure 6.3 shows the flowchart for Somewhere School's implementation of the Common Core State Standards. This specific flowchart shows their agreements for how they will start with the standards and assessments, what they will do when students know the information, and what they will do when students do not know the information taught. The flowchart provides staff members with a clear message of what is expected of them in their classrooms. The flowchart also provides the details needed for monitoring implementation, and for evaluating the impact of the approach.

Flowcharts help with the design, implementation, and evaluation of programs, processes, and procedures.

Figure 6.4 shows a big picture flowchart for how Somewhere School will implement the Common Core State Standards.

Figure 6.3
SOMEWHERE SCHOOL PREVENTION SYSTEM FLOWCHART (Part 1)

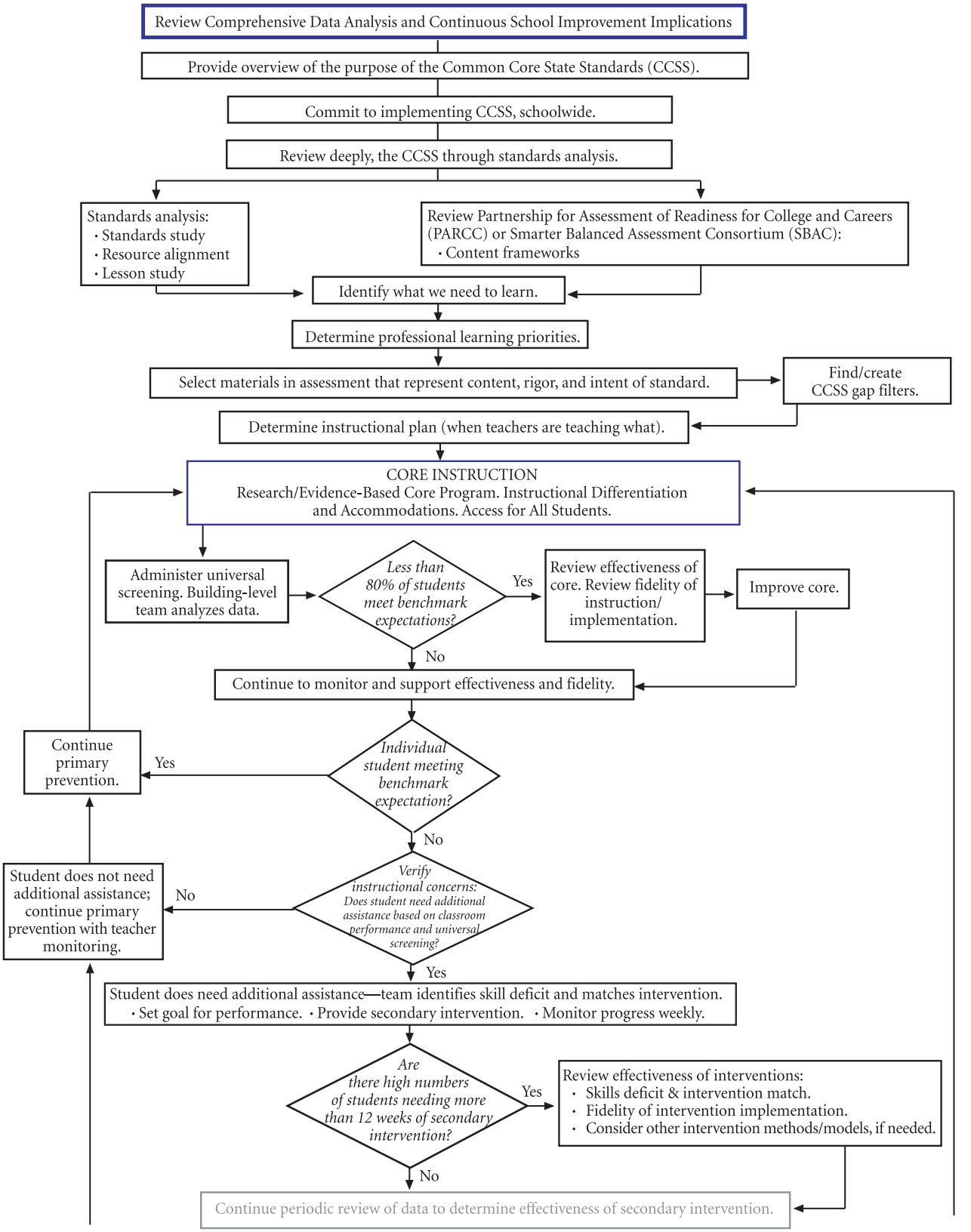


Figure 6.3
SOMEWHERE SCHOOL PREVENTION SYSTEM FLOWCHART (Part 2)

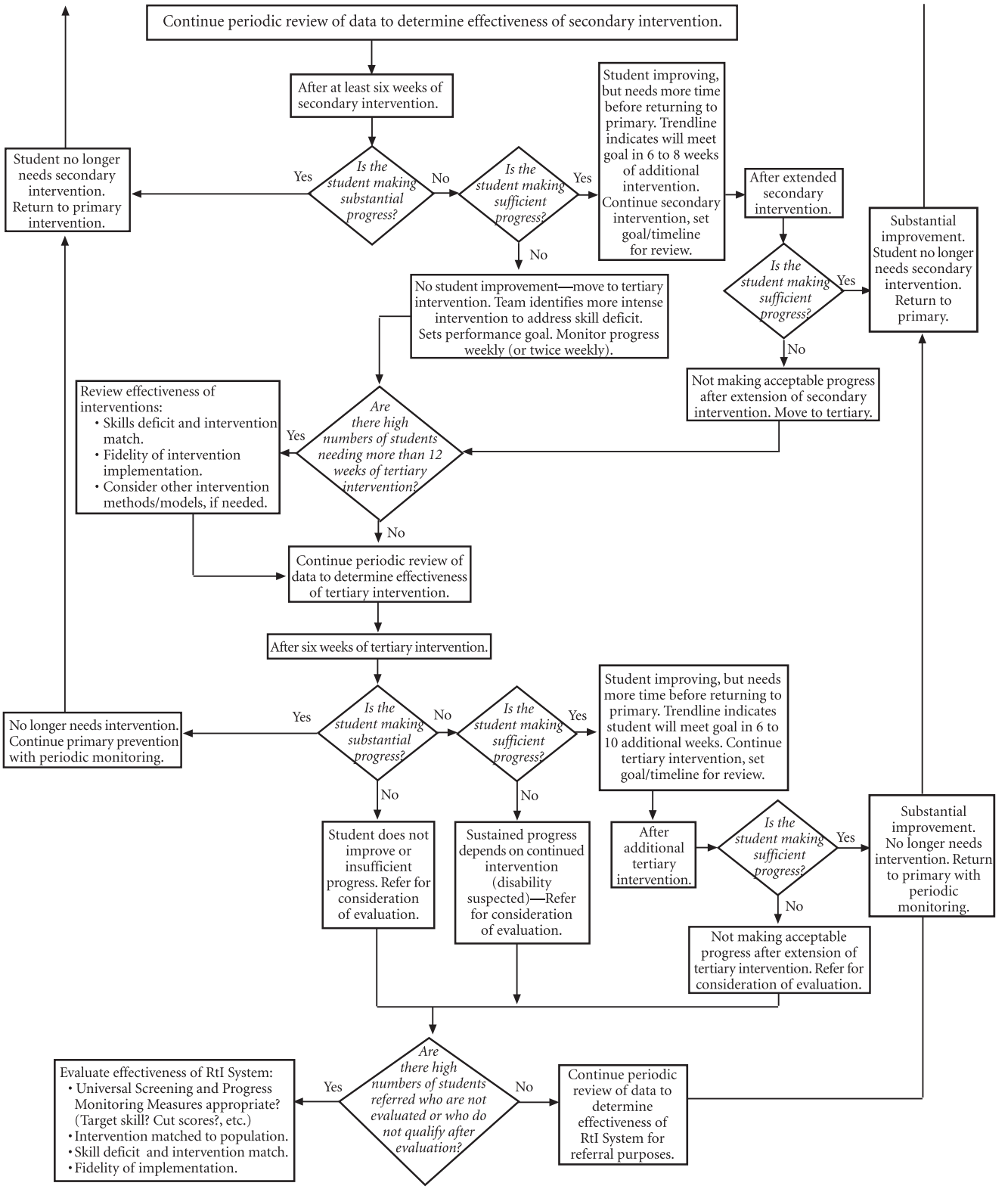
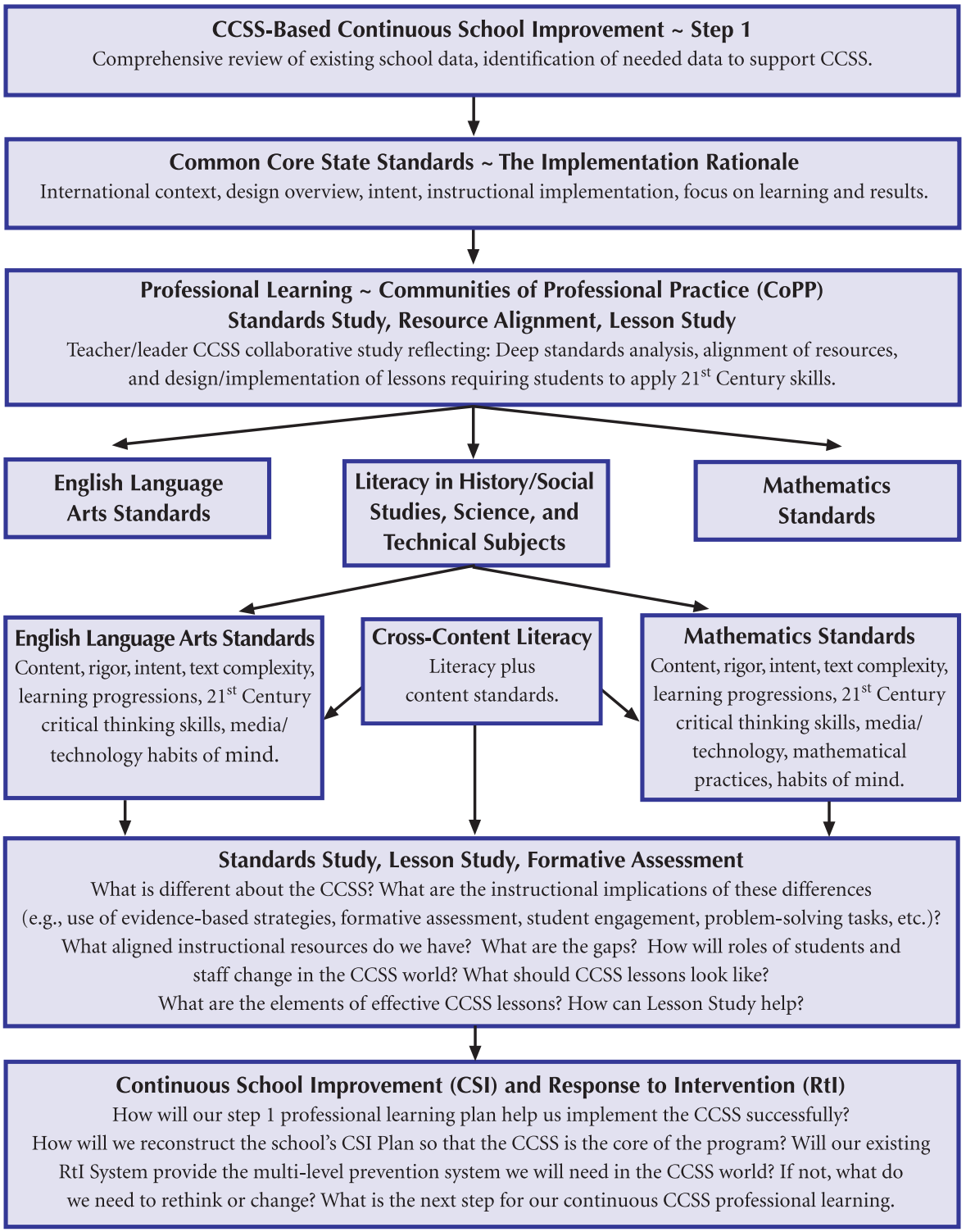


Figure 6.4
COMMON CORE STATE STANDARDS FLOWCHART



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